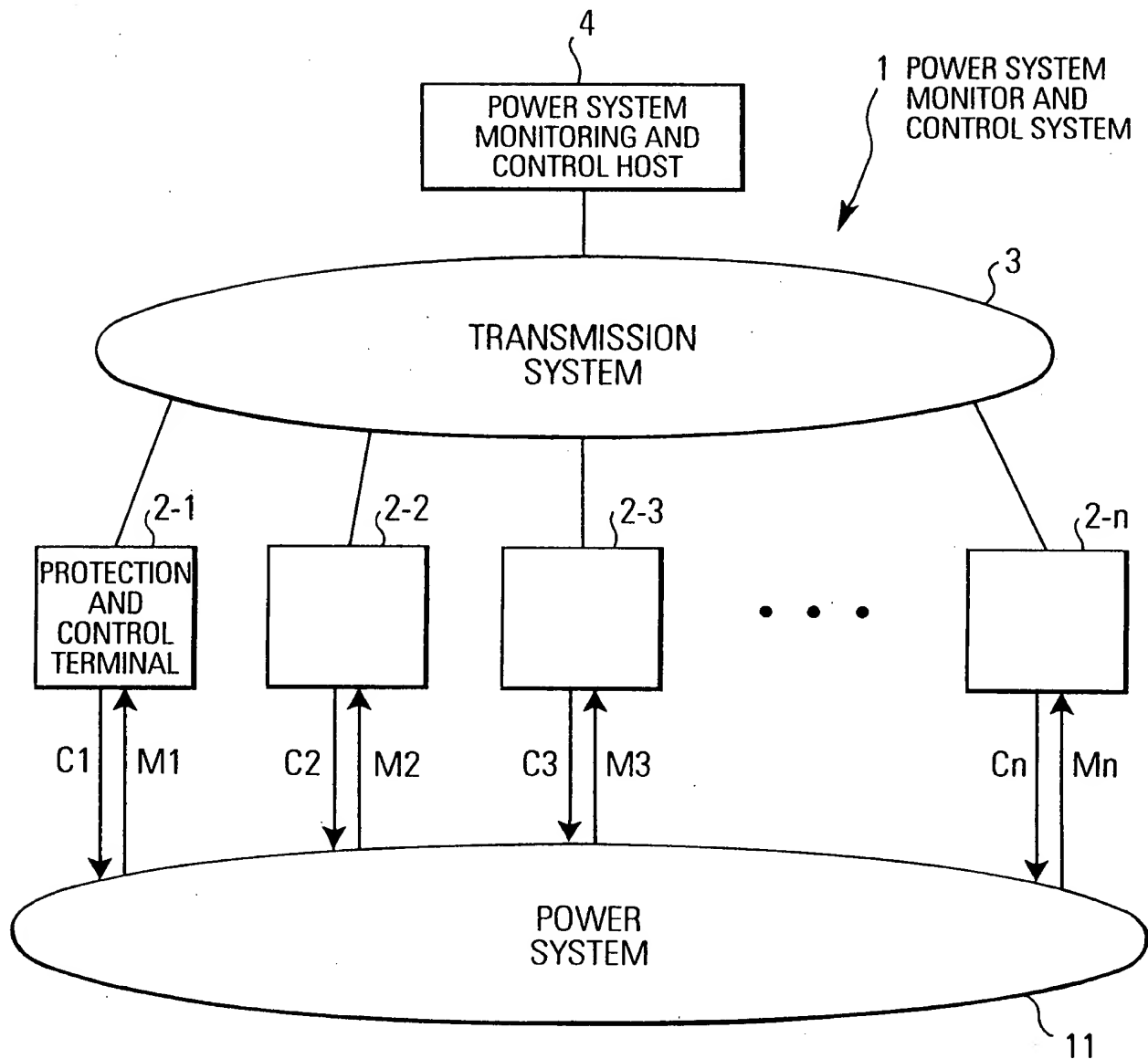
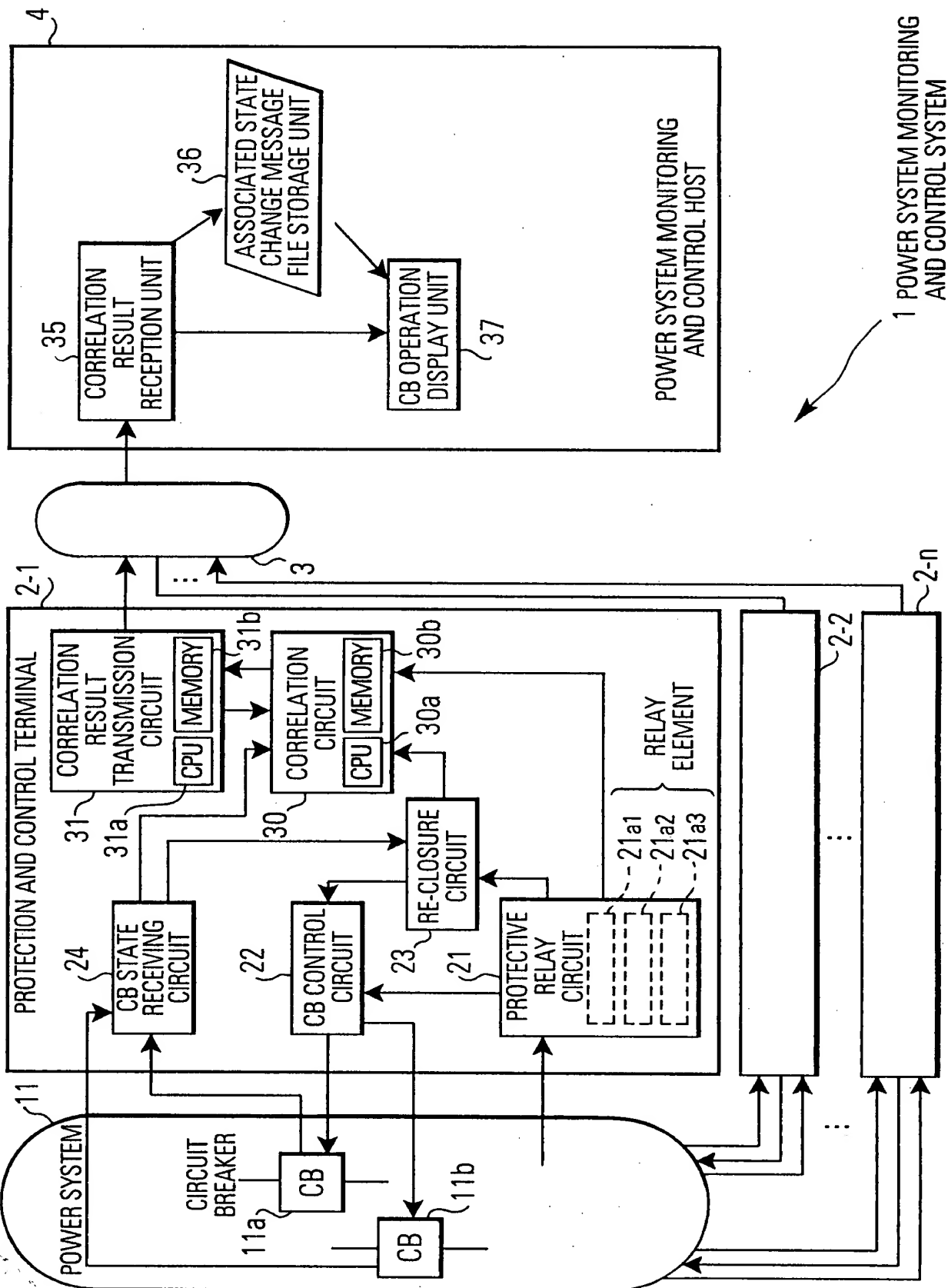
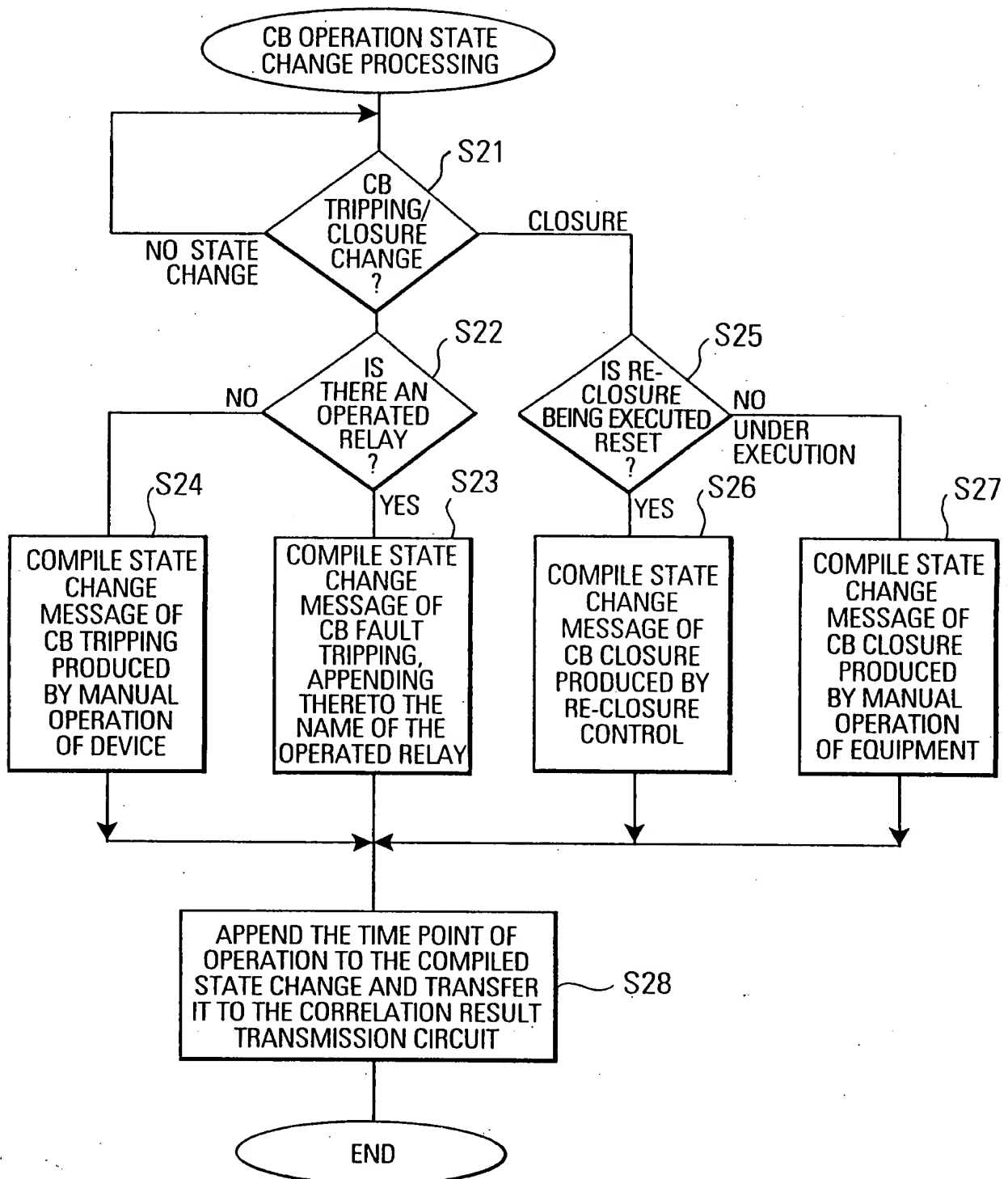


**FIG. 1**

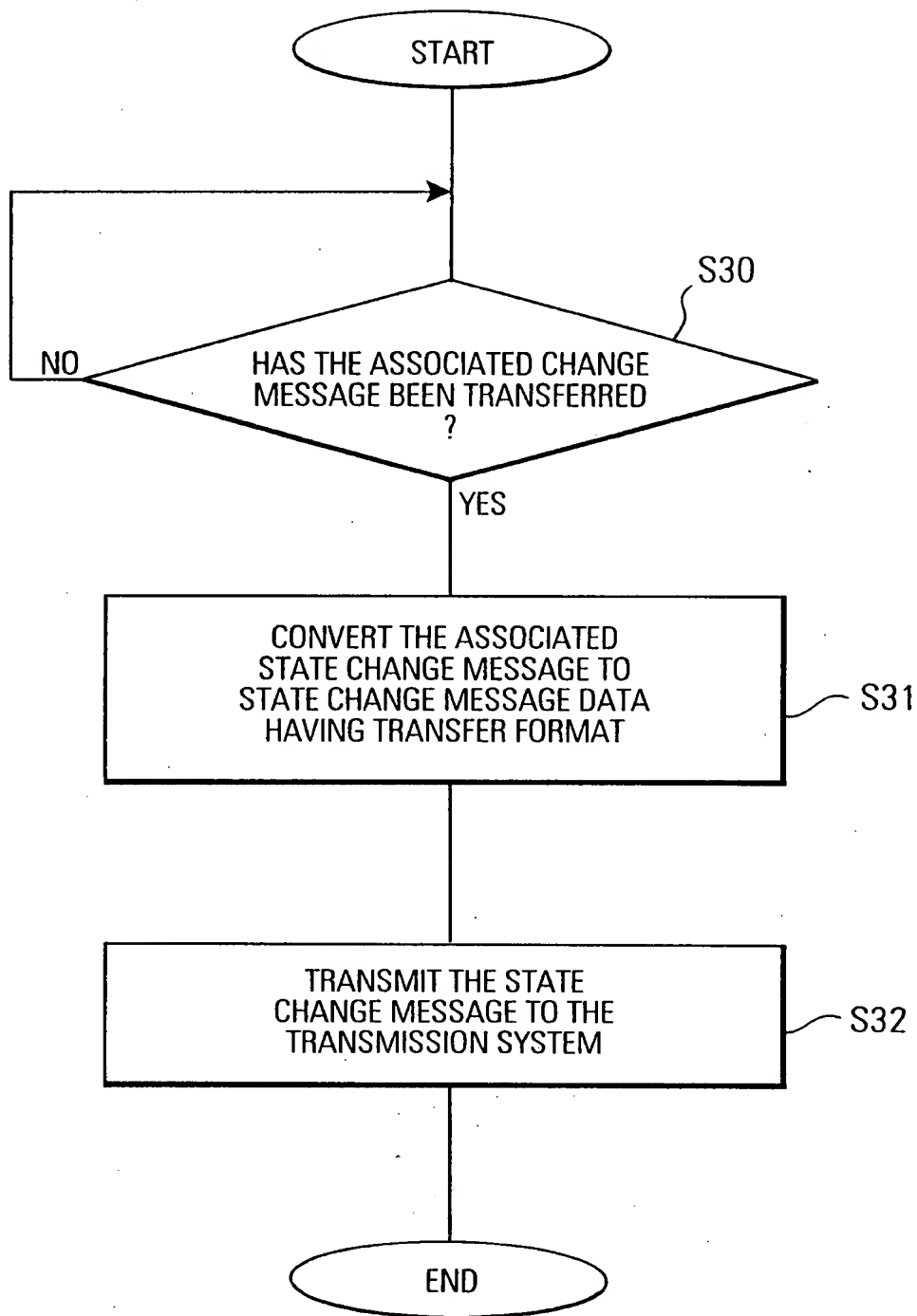
**FIG.2**



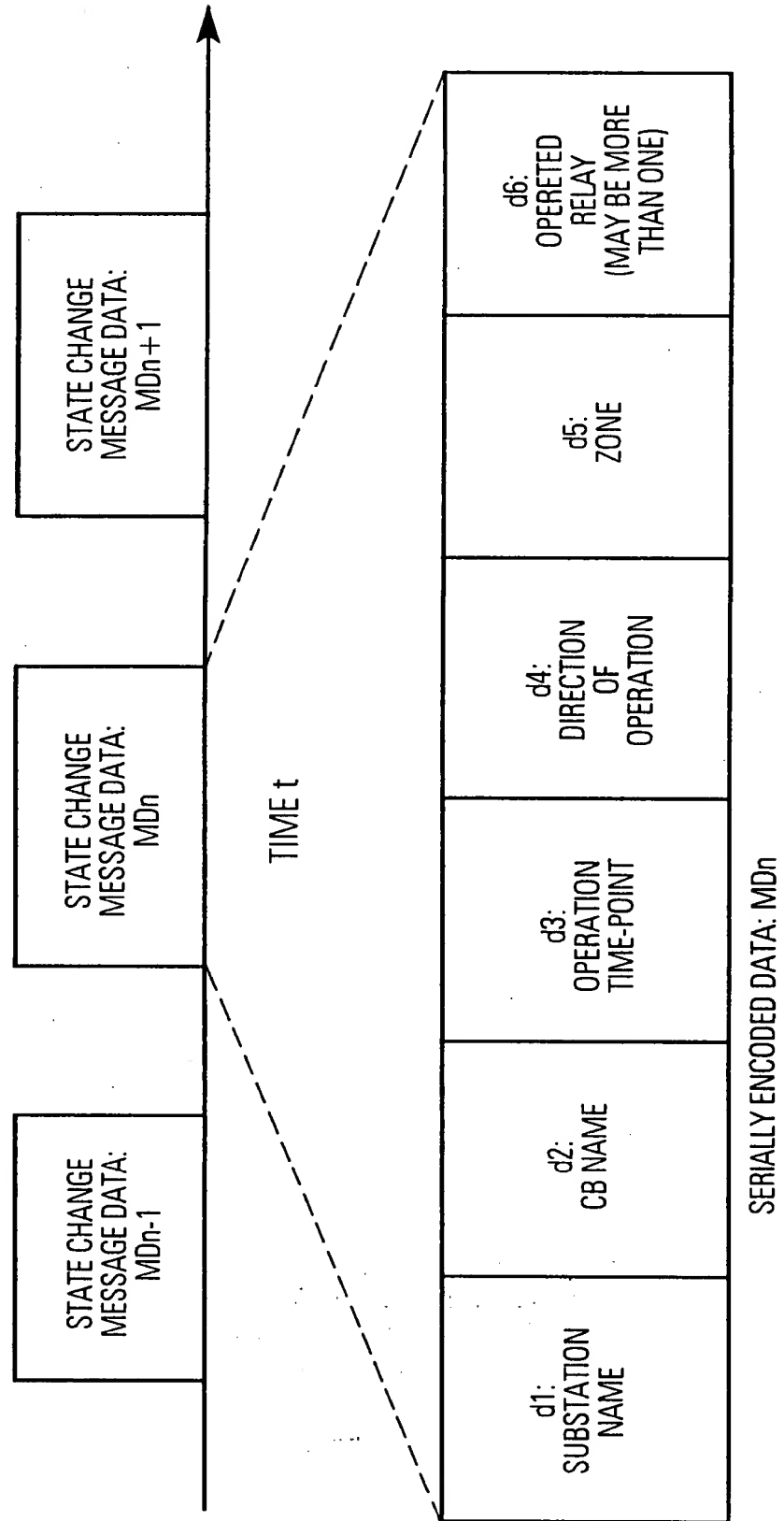
**FIG.3**



**FIG.4**



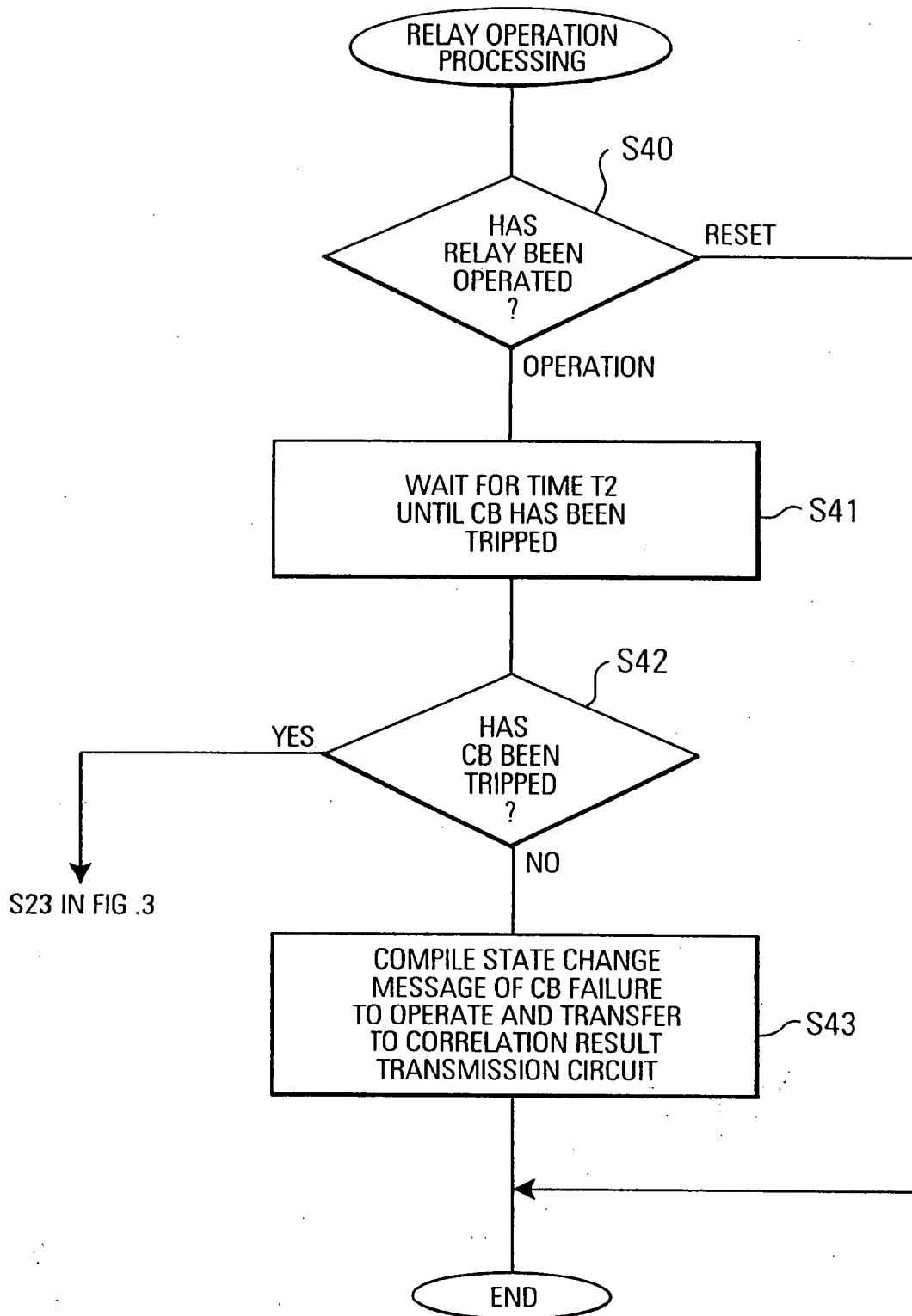
**FIG.5**



**FIG.6**

	d1	d2	d3	d4	d5	d6
MD1	SUBSTATION A	XY TRANSMISSION LINE 2L CB	10:10:10	TRIP	FAULT STATE CHANGE	MAIN PROTECTION (GROUND FAULT) BACKUP GROUND FAULT
MD2	SUBSTATION A	XY TRANSMISSION LINE 2L CB	10:10:11	CLOSE	RE-CLOSURE SUCCEEDED	
MD3	SUBSTATION B	XY TRANSMISSION LINE 1L CB	10:10:01	CLOSE	MANUAL STATE CHANGE	

**FIG. 7**



**FIG.8**

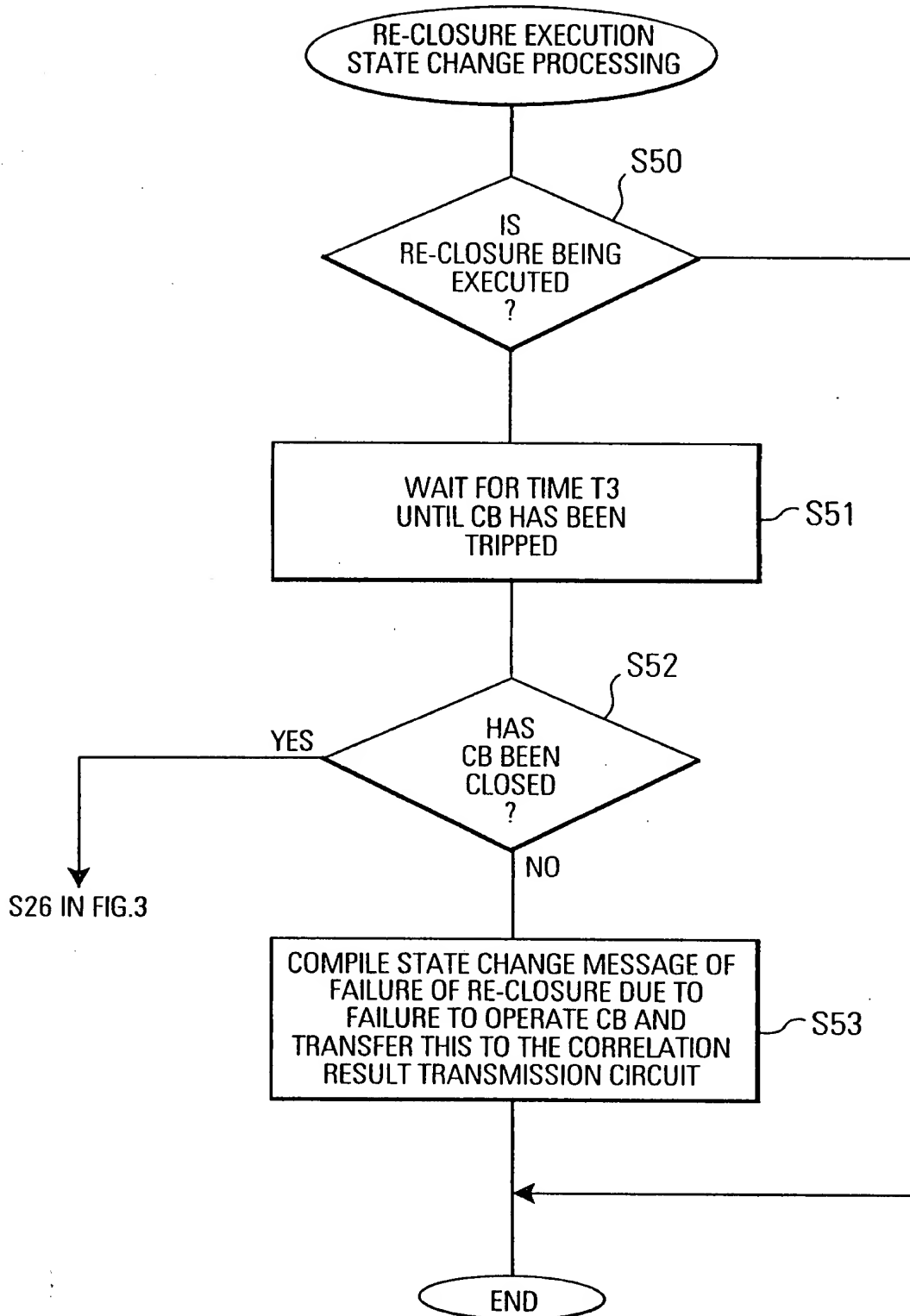




FIG. 9

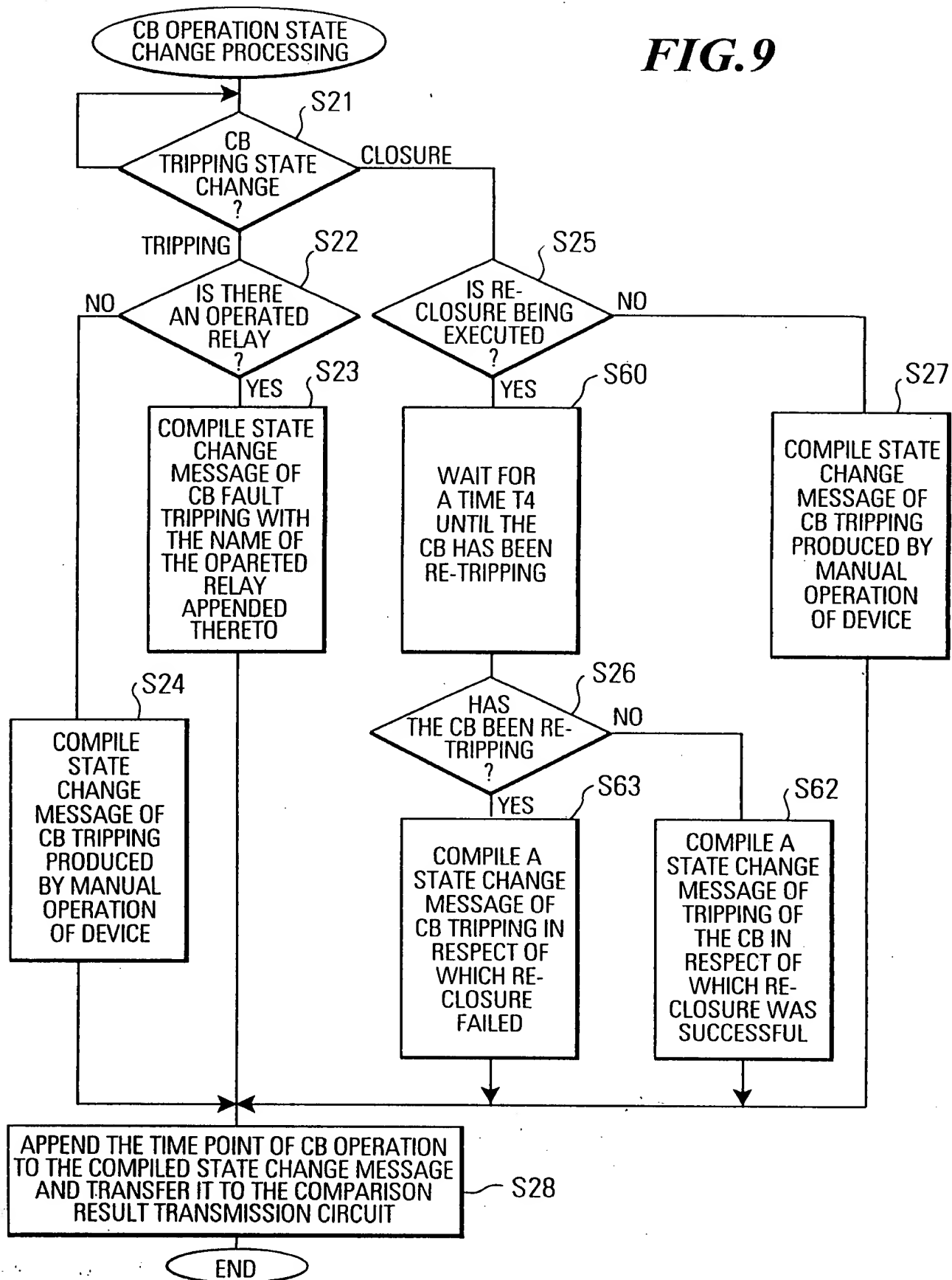
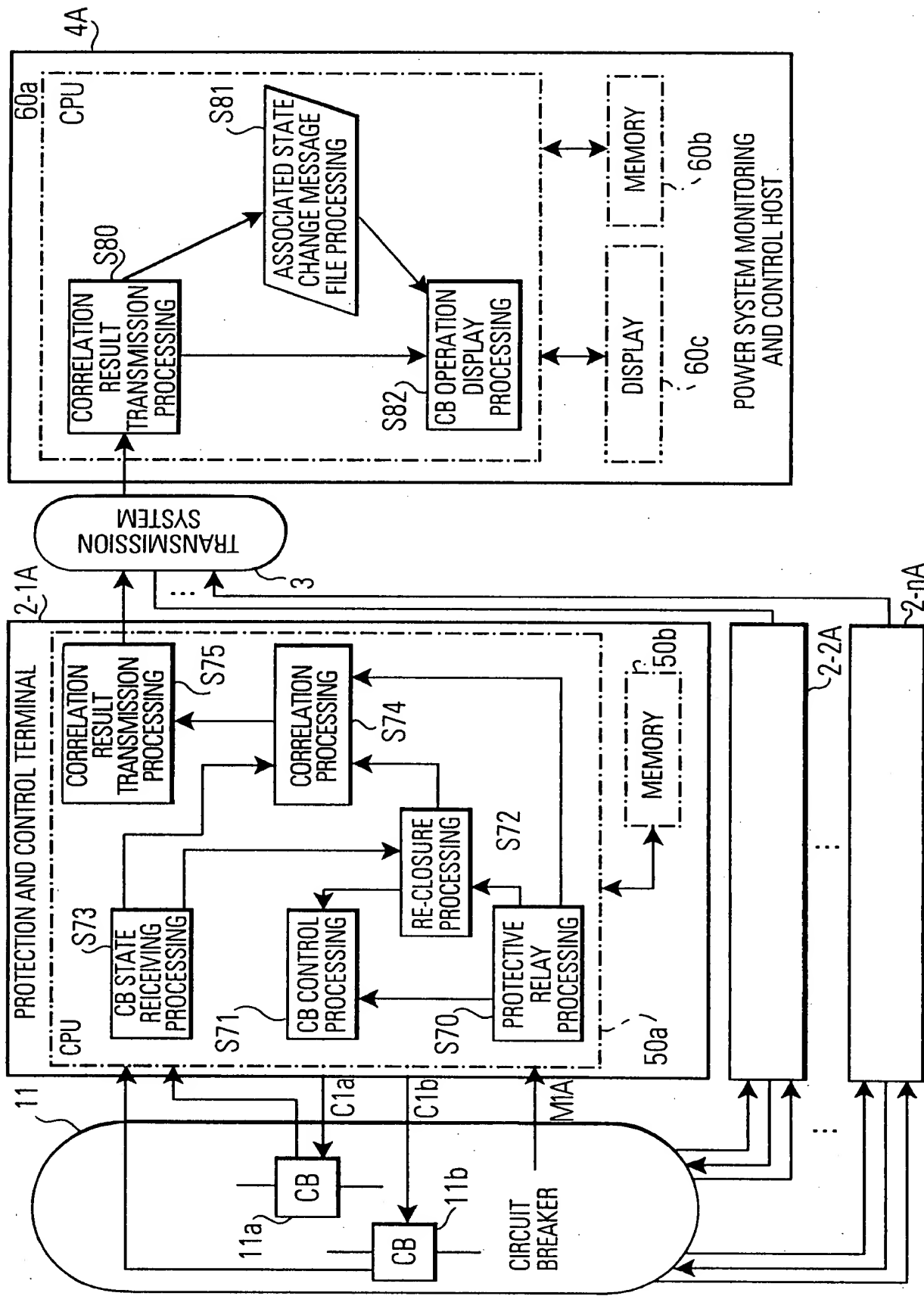
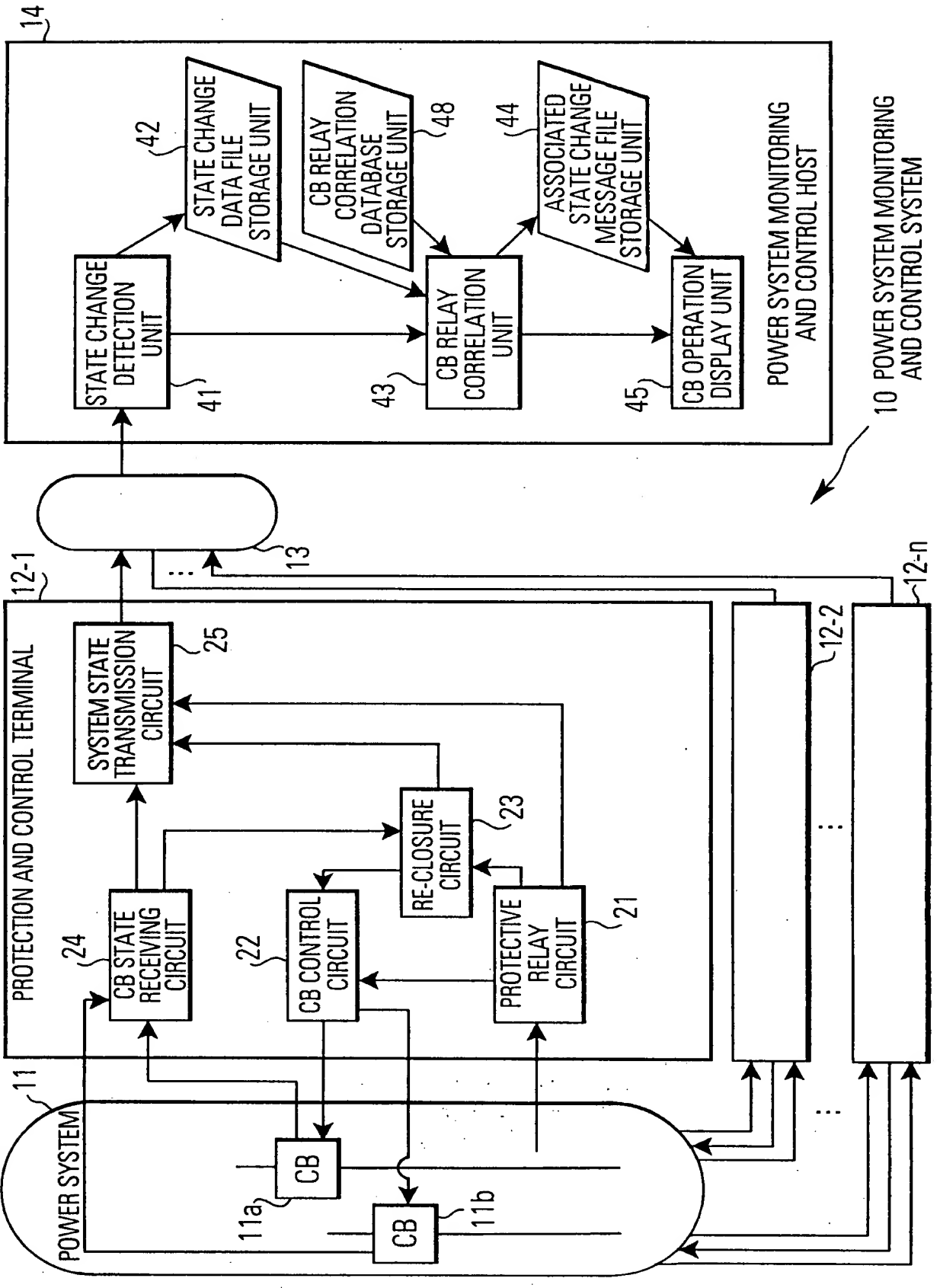


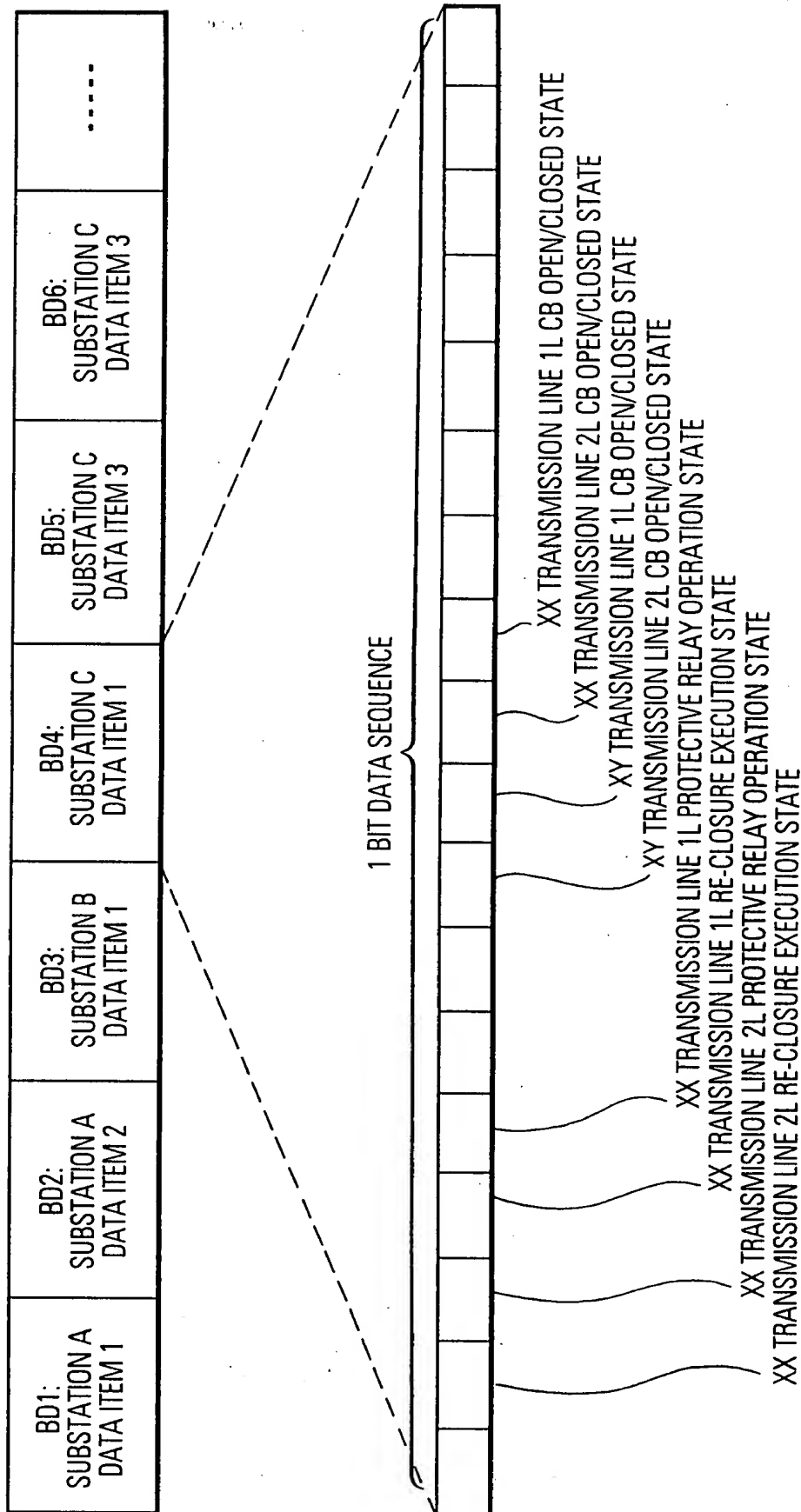
FIG. 10



**FIG.11**



# FIG.12



**FIG.13**

D1	JANUARY 19th 22: 01: 15	SUBSTATION C	XX TRANSMISSION LINE 1L	MAIN PROTECTION (GROUND FAULT)	OPERATE
D2	JANUARY 19th 22: 01: 15	SUBSTATION C	XX TRANSMISSION LINE 1L	CB	TRIP
Dx1	JANUARY 19th 22: 01: 15	SUBSTATION B	FF TRANSMISSION LINE 1L	MAIN PROTECTION (GROUND FAULT)	OPERATE
Dx2	JANUARY 19th 22: 01: 15	SUBSTATION Z	YY TRANSMISSION LINE 2L	CB	OPERATE
Dx3	JANUARY 19th 22: 01: 15	SUBSTATION A	FF TRANSMISSION LINE 1L	CB	TRIP
Dx4	JANUARY 19th 22: 01: 16	SUBSTATION A	FF TRANSMISSION LINE 1L	MAIN PROTECTION (GROUND FAULT)	OPERATE
Dx5	JANUARY 19th 22: 01: 16	SUBSTATION B	FF TRANSMISSION LINE 1L	CB	TRIP

**FIG.14**

M	JANUARY 19th 22: 01: 15	SUBSTATION C	XX TRANSMISSION LINE 1L	CB	FAULT TRIP	MAIN PROTECTION (GROUND FAULT)	OPERATE
M1	JANUARY 19th 22: 01: 15	SUBSTATION Z	YY TRANSMISSION LINE 2L	CB	FAULT TRIP	MANUAL OPERATE	
M2	JANUARY 19th 22: 01: 15	SUBSTATION A	FF TRANSMISSION LINE 1L	CB	FAULT TRIP	MAIN PROTECTION (GROUND FAULT)	OPERATE
M3	JANUARY 19th 22: 01: 15	SUBSTATION B	FF TRANSMISSION LINE 1L	CB	FAULT TRIP	MAIN PROTECTION (GROUND FAULT)	OPERATE

**FIG.15**

CB: SUBJECT OF CORRELATION	ASSOCIATION WITH DIRECTION OF TRIPPING	ASSOCIATION WITH DIRECTION OF CLOSURE
. : :	. : :	. : :
SUBSTATION C: XX TRANSMISSION LINE 1L CB	1) SUBSTATION C: XX TRANSMISSION LINE 1L MAIN PROTECTION (GROUND FAULT) 2) SUBSTATION C: XX TRANSMISSION LINE 1L BACKUP PROTECTION 3) SUBSTATION C: BUS PROTECTION	SUBSTATION C: XX TRANSMISSION LINE 1L RE-CLOSE
SUBSTATION C: XX TRANSMISSION LINE 2L CB	1) SUBSTATION C: XX TRANSMISSION LINE 2L MAIN PROTECTION (GROUND FAULT) 2) SUBSTATION C: XX TRANSMISSION LINE 2L BACKUP PROTECTION 3) SUBSTATION C: BUS PROTECTION	NO ASSOCIATION
. : :	. : :	. : :

**FIG.16**

